

CONSTANT DENSITY PRINTER SYSTEM

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ABSTRACT

An ink density closed loop control system for an
ink ribbon of an impact printer having a reservoir
10 roller formed of an ink absorbent material with at
least one or more channels within the reservoir roller
fluidly connected to a pump and ink supply. A transfer
roller can contact the reservoir roller for imparting
ink to the ink ribbon. A sensor senses the relative
15 amount of ink on the print ribbon and an electrical
drive responsive to the sensor drives the pump for a
flow of ink to the one or more channels. The sensor
can sense ink on different segments of the ribbon and,
with two or more channels in the reservoir roller can
20 distribute ink to two or more segments of the reservoir
roller depending upon the ink sensed at a particular
segment of the ribbon. A further enhancement of this
invention provides a multi-viscosity ink to compensate
for changes in ambient temperature conditions.